

ABSTRACT OF THE DISCLOSURE

[1026] A voltage reference generator has been discovered that generates a stable reference voltage that is less than the bandgap voltage of silicon for power supply voltages less than 2V, yet provides sufficient voltage headroom to operate a cascaded current mirror. In one embodiment, the voltage reference generator has a power supply rejection ratio of at least 60dB and has improved noise performance as compared to traditional bandgap circuits. These advantages are achieved by leveraging the low-beta effect of a CMOS bipolar transistor to generate a current proportional to an absolute temperature.